A critical review of the declining role of agriculture for economic diversity: Implications for adult education as a change agent

Wapula Raditloangeng

This paper provides a critique of globalization with a special focus on the declining role of subsistence agriculture as the backbone of peasant economy in colonial Botswana and the changes that have occurred since independence 30th September 1966. During the colonial and pre-independence era, agriculture was the backbone of peasant economy and poverty eradication in Botswana. The post-independence era in Botswana resulted in reforms in all the public sectors including education, health, agriculture, tourism, trade, industry, science and communication and others which are typified in the cash economy. Based on a mixed methodology of qualitative and participatory activities in the study of the impact of the identities of a total of 30 poor people poverty in two selected communities (one rural and one urban) in Botswana, this paper argues that with the advent of globalization, agriculture as the backbone of peasant economy is faced with competition from the other sectors of the modern economy. Despite efforts to engage in diversification of the agricultural sector and harsh climatic changes and human factors, the sector has been adversely affected by climatic changes and human factors too. Based on the deliberation of the poor who participated in the study, to be the backbone of peasant economy and poverty eradication. Registered destitutes who participated in this study had not graduated from poverty to non-poverty at the time of the qualitative study conducted between August 2008 and March 2009, despite the monthly food basket they received from the Government of Botswana.

Key words: Botswana, agriculture, education, government.

INTRODUCTION

An understanding of the country context is important to illuminate the role of agriculture and existing challenges

Geography and people

Botswana, a former British protectorate for about 90 years prior to independence, is one of the landlocked countries of 562,000km² and the most sparsely populated country in Southern Africa. With a land area of about the size of Texas in the US, Kenya in East Africa and France in Europe. Botswana has a population of about 1.6 million people. Botswana attained political independence on the 30th September 1966. The tropic of Capricorn straddles across the Northern part of Botswana.

Climate and temperatures

Botswana is dry with very sporadic rainfall and a very high rate of evaporation. Temperatures range between 20 and 26°C in the north and 21 to 23°C in the Southern parts. Low rainfall and poor soils are found especially in the Kalahari Desert (Ministry of Finance and Development
Harning, 2003).

Settlement patterns

Botswana generally have four patterns of settlement: Village, (rural country side) lands (for ploughing) a cattle post (raising livestock), town or city (for employment). People move seasonally between these patterns of settlement.

Administrative and infrastructural development

Botswana is a democratic country that promotes freedom and social justice. Batswana has a legislature that provides for a national assembly (parliament), with an executive and a house of chiefs which is an extension of the traditional monarchy. As a British Protectorate, Botswana had been largely neglected by the British administration and the incoming government of the first president (the father to the present President Khama) had very little infrastructure on which to launch a sound economy in 1966. By 1981, the Gross Domestic Product was P7 billion (US$3.5 billion) and the economy has been growing at 13 percent annually. GDP fell by 22% compared to the last 2003. The estimated GDP at current rates for the first quarter of 2009 was P74,914, which is a 33% decline due to decrease in consumption of electricity by the diamond industry and a slump in inventory accumulation, particularly minerals (The Botswana Gazette Central Statistics Office, 2009).

Gaborone has developed into a city of over 140,000 inhabitants.

Principles of national development

Botswana's development plans are based on the 5 national principles of democracy, development, self-reliance, unity and Bolthe. The five principles are based on Botswana's cultural heritage with the ultimate goal of promoting national harmony at Kgisiso (Presidential Task Group on A Long Term Vision for Botswana, 1997).

The objectives of national development are sustained development, rapid economic growth, economic independence and social justice. This paper focuses on the development and decline of agriculture as the backbone of the economy in Botswana, the major impact and land marks of the cash economy and the declining role of agriculture as a by-product of economic diversification and the impact of the cash economy. The analysis of the decline is based on the findings of a qualitative study of thirty registered destitute who had not managed to graduate from poverty to non-poverty because of the diminishing role of agriculture typified in the many cycles of drought since the early 1980s. Destitutes are registered after a thorough assessment by social workers in the Department of Social welfare and community development countrywide. The procedure for registration varies from individual, it can be proactive or reactive. Some destitutes are recommended by people in the wards where they live, based on need, while others show up at the nearest offices provided they have evidence that they are needy enough to qualify for benefit from the Institute policy.

In 1965, the Bechuanaland Protectorate gained independence from the United Kingdom and became the Republic of Botswana. The country was very poor and the illiteracy was very high. One of the greatest challenges to the newly established government was to set up the social and physical infrastructure essential for the graduation of Botswana from one of the poorest countries in the world to a middle income country. With aid from other countries, especially the United Kingdom (UK) and the United States of America (USA), the country embarked or diversifying the agricultural sector to cushion farmers from natural disasters such as drought, lack of surface water, high rates of evaporation, heat and infertile soils.

METHODLOGY

The two main methods of data collection were focus group discussions and one on one life histories of a total of thirty respondents in two areas, one urban and one rural. In Botswana, focus group discussions were held with two groups of poor people to enable a process of dialogic discussion and interaction between respondents and the author. The two focus groups are an established method of social inquiry (Nisbett, 1997; Krueger, 1998) and a reliable and cost effective method for exploratory research. They were also a potential stimulus for exploration of issues where individual interviews proved too daunting or inhibiting focus groups. Participatory exercises in drawing maps of their communities and life history interviews were main sources of data collection.

However, in focus groups people may result in not giving their personal views, but rather contribute to a more general `groupthink' (Chirino et al., 2003). Some people may not have an equal chance to speak. There is heavy reliance on the interviewee to act as a facilitator to ensure equal participation (Khirman and Starbou, 1999). Finally, there are problems of transcription and identification of individual voices during transcribing. In this study, the advantages outweighed the disadvantages. For reasons of cost and time focus groups was a useful strategy to reach sufficiently the two groups of people in different geographical settings.

Life history interviews provide access to rich, unstructured and experiential knowledge about socialization to accept poverty, dependency on the Government of Botswana monthly ration and the declining role of the agricultural sector in eradicating poverty. Biographical life history research has become a major feature in the research on adult learning in recent years and has a methodological significance that have been discussed in some depth (Duncan and Lincoln, 1998). Life histories are a popular method for explaining the experiences of marginalized groups, illuminating gender issues and interconnections between language, power and meaning (Moore and Halmo, 2004, p. 7). This is because individuals interpret the past according to their own subjective experience. Such narratives can help explain the how of situations. Their strength is not
in their factual validity, but in helping readers to understand social norms and customs within a specific context and the individual’s location within these contexts. Such accounts can help to ease the issues behind more generalised versions of the present, Koffi and Halme claim that life history data can provide a valuable critique of development policy and the necessary information for improved responses to particular circumstances and for the formulation of more appropriate and effective development interventions (2004 p. 11). Personal histories also provided useful benchmarks for comparing the collective stories of how people were socialised to accept poverty and the limitations the agricultural sector in giving them an opportunity to earn high yields for food security at household and national levels.

The participants drew maps of their village towns and that generated a lot of interesting discussions amongst themselves. The value of participatory exercises was to tap on indigenous knowledge the participants about their environment.

The biographies of the thirty respondents (10 in Lentsweletau and 20 that is in Peoleng and 10 Woodhill areas in Lobatse) was of great importance to those coming from the province. The literature coming from those people was found to be more reliable as the participants shared their knowledge and experiences with the agricultural sector and reflected how the individuals themselves conceptualised their own poverty identities. All the respondents were selected through the Social Welfare and Community Development officers (S and CD) in their respective villages. On behalf of the researcher, the S and CD officials called them to a meeting at either the local council meeting place or community halls for briefings and interviewed as groups after the pilot stage suggested that their primary socialisation was through the voice they identified with poverty were similar for them. The researcher took advantage of the monthly ration days and used them to meet others who had gone to the S and CD offices for their monthly food basket. Key informants from the three research sites were also interviewed as members of focus groups to avoid duplication of data. The interviews and focus groups were held at the time most convenient for the researcher and the participants.

Conceptual framework

This paper is firstly informed by the concept of lifelong learning which suggests that learning takes place at birth. Adult Education as a field of study distinguishes to the concept of lifelong learning which connotes that human beings learn from the cradle to the grave. Learning is a permanent change in behaviour which takes place as a result of acquisition of knowledge, positive attitudes and ability to apply the skills to real-life situations. Merriam further cited and gave an update of several theories of adult learning in (1998). Among them, transformative learning, consciousness raising and learning. Situated Cognition, Critical Theory, Feminism and Adult Learning are Self-Directed Learning. In summary, the author of this paper collates all the different theories of adult learning into two main elements: motivation and environmental. The classification of adult learning theory into two streams suggests that people identify with what they have learned through the realm of the mind (cognition) and visible behavioural changes (Hackett et al., 1993).

Acquisition of knowledge, positive attitudes, skills and identity formation are by-products of primary socialization and secondary interaction with people and institutions from all walks of life, experiences and identities. Based on the first phase of the qualitative collaborative study of the learned identities of poor people in two selected remote areas of Botswana, the author argues that the existential experiences of poor people from early childhood have shaped who they are. This includes constructions on how they see themselves, their vision (or lack of vision) they have for themselves to make transitions from poverty to non-poverty, acceptance or non-acceptance of poverty. The search for options, if any, the poor’s thought processes and development of poverty identity belief systems. Socialization to accept poverty status blunts their vision from perceiving agriculture as an alternative to poverty reduction.

This paper is informed by Critical Theory using the history approaches to data collection and trends in the agricultural sector since 1986. The author observed and explored the paradigm shift from dependency on agriculture to diversity and its implications for the role of Adult Education in a changing world across all fields including Agriculture. Critical theory offers a critique of the agricultural sector and how it is not in its own, adequate for people who have learned identities to graduate from poverty to non-poverty. A critical research question the researcher faces is how they were socialised from early childhood and factors that made it impossible for them to graduate from poverty to non-poverty through alternatives other than the government’s Botswana welfare system.

Agricultural development

The responsibilities of the Ministry of Agriculture cover sectors such as the rearing of cattle and small stock; animal husbandry, various crops including corn production, conservation of the environment and cooperative development. These programs are funded by the Ministry of Agriculture and Forestry, the Department of Animal Health and Production, Department of Integrated Agricultural Research, Department of Cooperative Development and Botswana Agriculture and Resource Development. The department of Agricultural Planning and Statistics and Agricultural Information and Public Relations Division. The responsibilities of the different divisions vary on the method from these agriculture from the level of subsistence to commercialization. Over the years, several cycles of drought have adversely affected the sector and this resulted in very low farm yields and reduced cattle diseases such as tick and mouth, cattle lung disease and other natural disasters.

Two major departments that are the focus of this analysis are the Department of Animal Health and Production and the Department of Crop Production and Forestry.

The department of animal health and production

This is one of the biggest in the Ministry of Agriculture comprising five divisions: Veterinary Field Services, Livestock and Veterinary Disease Control, Meat Hygiene and Quality Control, National Veterinary Laboratory and Animal Production.

Key projects of this department include: Able Land Development Programme (ALDP), Irrigation Development, Emergency Plant Protection, Land Use Monitoring and Planning, Small Projects Programme, Horticultural Development and Soil Conservation. The overall objective is to promote productivity of the sector in Botswana through provision of subsidies, loans and introduction of appropriate technologies.

The role of extension service

The Extension unit within the Ministry of Agriculture is responsible for equipping the farming community and institutions with relevant skills and appropriate technical knowledge to undertake a variety of projects such as crop diagnosis, beekeeping, pollution control and public awareness and sensitisation to the process of beekeeping.
There are other extension workers that cut across all government of Botswana Ministries of Health, Minerals, Water and Energy, Communication, Science and Technology, Education and so on. The role of agricultural extension is to work with rural communities to improve all aspects of pastoral and agricultural development. Extension workers assigned to the Ministry of Local Government are responsible for distributing monthly rations to the registered destitute.

Crop production

The main role is to provide specialized and appropriate technical information and support (including back-roping) to the farming community through the existing delivery system for the improvement of all types of crop production. Farm machinery and implements are also made available. The Agricultural Research and Development (ARDEP) and Drought Relief Programmes are coordinated and administered under the Division. The registered destitute asserted that crop production was no longer viable for subsistence due to drought and floods.

Agricultural schemes

The Andile Land Development Programme (ALDEP) and the National Master Plan for Arable Agriculture and Dairy Development (NMPADDD) are some of the major schemes that the government of Botswana adopted to improve the quality of the agricultural sector, especially upgrading of small farmers. ALDEP Demonstration Farms (DAF) were established, where participatory trials and demonstrations are done with the overall purpose of increased production. The emphasis of all the various schemes is to equip farming community with field crop production to enable them to increase crop yields per unit area. Transfer of technology is undertaken regularly through crop demonstrations, field days and farm walks, conducting formal and informal training in agricultural development for food and plant scientists.

NMPADDD is a plan intended to streamline small agricultural and dairy development programs to address the following existing policy objectives:

i) Improvement in food security at both household and national levels
ii) Diversification of the agricultural production base
iii) Increased agricultural output and productivity
iv) Increased employment opportunities for the fast-growing labor force
v) Provision of a secure and productive environment for agricultural production
vi) Conservation of scarce agricultural and land resources for future generations.

The plan is to be implemented over a period of ten (10) years. The first three years of implementation included the establishment of pilot projects in areas of high production potential designated as priority areas in the Master plan.

NMPADDD is expected to make arable and dairy farming profitable and more attractive to farmers, thereby create employment opportunities, increase rural income and reduce rural to urban migration. It was also expected to succeed in transforming the agricultural sector because it would complement the private sector initiatives that included quantifying performance objectives with measurable targets being put in place to improve performance and accountability across the sector. NMPADDD is different from the previous agricultural programmes in that:

a) Targets co-operative and commercial farmers thus will enable traditional farmers to transform to commercial farming and assist commercial farmers to upgrade their technologies and management levels.

b) Encourages more involvement of the private sector and civil society in both farming and the provision of supporting services. This promotes and facilitates joint partnerships between investors and farmers and among farmers themselves.

c) Promotes the establishment of agro-industries such as cotton ginning, agro-processing plants and other enterprises such as transport to conserve the agricultural industry and create additional employment opportunities in rural areas.

d) Supports the present cotton growers approach to a business approach to farming instead of relying on grants and subsidies, farmers and other participating entrepreneurs will be encouraged to access finance from CEDA and other financial institutions. Where incentives are justified they are targeted to benefit areas and areas where they guarantee a positive change to farm productivity.

e) Establishes with private sector involvement a contributory insurance scheme to cover agriculture production base in years and in specific regions designated as sensitive or vulnerable. This is expected to be a confidence building measure to encourage investment in agriculture and improve access to credit.

f) Provides an enabling environment for agriculture production, including the development of infrastructure in production areas with high potential.

The plan intends to improve production in three broad areas: namely, Rabi allied agriculture, Irrigated agriculture and Dairy development. However, the schemes had not benefited the registered destitute because of lack of drought, lack of security and poor health. Markets for crops and livestock were also limited to Botswana Agricultural Marketing Board and the local farmers’ markets where crops and livestock prices were bought at very low prices compared to those outside the country. Market prices made agriculture not a viable business especially for small and marginal farmers with very limited capacity to produce amounts huge enough for export. Registered destitute have remained dependent on the Government of Botswana for handouts since, with changing lifestyles, subsistence agriculture is no longer able to provide the needs of the rural and urban communities.

Major constraints of the agricultural sector

Land utilization

Promotion of good land husbandry practices, generation of land resources baseline data required for sustainable and resources management and the development of surface and subsurface water resources is primary for livestock watering and irrigation which are the core business in animal health and production are constrained by weather conditions.

Promotion of Land sustainability is a problem. The Government of Botswana National Land Policy Study of 2005 indicates problems of land administration and land grabbing by people relatively able to purchase land for commercial agriculture and real estate development. Soil Surveys and mapping indicate suitable soil except for the eastern part of the country with better rainfall. Use of land for soil and grain farming also depletes the potential of using land for stable and pastoral agriculture.
Water development and preservation

The programme provides the agricultural community with water resources and campaigns for the establishment of small water tanks and wells for livestock watering and irrigation since Botswana is a dry country with very sporadic rainfall. Sand river abstraction and other rain harvesting techniques are also encouraged and piloted where there exist potential for their viability.

Pesticide use

The Division of Plant Protection is one of the four divisions within the Department of Crop Protection, which is part of the Ministry of Agriculture. The division was established in 1969 to address the countrywide outbreak of pests which would not spare any plant. It is mandated to spearhead the control management of the crop pests and diseases. It has a programme which aims at educating farmers about protecting plants from pests and the use of pesticides. Provision of technical support to farmers and staff to control both migratory and other pests. There is a well-established collaboration line between the division's crop clinic and Department of Research where samples are referred for detailed analysis and diagnosis.

DISCUSSION AND ANALYSIS OF THE FINDINGS OF THE EMPIRICAL STUDY

The discussion centered on why the poor had remained poor and not used alternative approaches to poverty reduction. Factors such as agriculture, Botswana’s weather and the dependency syndrome on Government of Botswana’s monthly food baskets and other handouts to serve as safety nets are important factors in understanding why the poor had not graduated from poverty to non-poverty. Botswana has an extension cadres (part of the family of cadres employed by Government of Botswana ministries), made of officers that serve as link between the government and rural communities including the poor. Extension workers, particularly social welfare and community development officers, are responsible for assessment of the poor and ensuring that they are targeted to benefit from relevant Government of Botswana programmes. Agricultural extension services are provided to give farmers an opportunity to use technology, new ideas and new methods of farming to improve farm products.

Agriculture as a backbone of peasant economy falls within the responsibility of the Ministry of Agriculture discussed earlier in the section. A semi-structured interview schedule with about 11 demographic open ended questions posed for answers from the poor communities in the two research sites. Major findings of the study suggest that indeed the poor develop and ultimately possess demographic characteristics often identified with poverty, were related to their poverty crises and self reproducing identities and abilities that uniquely differentiated them from the non-poor. The poor also did not envision agriculture as relevant for graduating them from poverty to non-poverty. Agriculture as an alternative to poverty reduction had not been significant enough for the registered institute to graduate from poverty to non-poverty.

Demographics of poor people

Altogether, 30 participants were interviewed from the three study sites; (10 from Letsekeletso, 10 from Peleng and another 10 form Woodhill in Lobatse). The criteria for selection of the three sites were that they are known to have residents identified with poverty.

Participants’ age and gender

The participants’ age ranged from 32 to 70 years. Altogether 24 men were interviewed and 6 women. This indicated that women, compared to men, are more likely to be poor. Poverty is a gender-based problem that disproportionately affects men and women, boys and girls from early childhood. Although half the participants were under 65 years of age, they looked much older than the researcher had expected. They had developed age-related decline such as poor physical and emotional health much faster due to conditions associated with poverty and lack of a decent standard of living.

Education

The highest level of education attained by just one of the participants was Junior Certificate (JC), which is the first ten years of basic education. The rest had never been to school, of failed to even reach basic primary school leaving exams (STD 7 or grade 7).

Poverty (income and non-income) is often identified with social ties including the following-low education levels, lack of assets, no food and no money. Furthermore, the poor lack basic needs like shelter, food and drinking water. Communities groups. Amongst the most vulnerable groups are women, Batswana ethnic group and other Remote Area Dwellers who use alcoholism as an escape route from poverty. However, alcohol and substance abuse only make the poor relapse deeper into poverty. The poor have limited or no income or wage based-job for survival and have a culture of unwillingness to work once they have accepted poverty as part of their lives. Agriculture therefore did not feature as the backbone of their daily activities.

Community profile

More participants were drawn from the town of Lobatse because already the general population was relatively much higher than the population of Letsekeletso village.
Table 1. Community profile.

<table>
<thead>
<tr>
<th>Study area</th>
<th>Total population</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lobatse</td>
<td>4,025</td>
<td>1,852</td>
<td>2,173</td>
</tr>
<tr>
<td>Lobatse</td>
<td>30,563</td>
<td>14,745</td>
<td>15,818</td>
</tr>
</tbody>
</table>

The higher the general population, the higher the likelihood of having a high poverty-striken population (Table 1).

**Migration history (groups)**

The poor migrate everywhere from one remote area to the other. Poverty has a gender dimension that Female Headed Households (FHH), abusers of alcohol and substances, destitute and people who migrated to settlements or people who came from elsewhere due to their nomadic lifestyles were more prone to poverty than stable families. Others have migrated from neighbouring countries such as Zambia, Zimbabwe, Namibia and South Africa. They hunt and gather from settlements and seasonally moved to villages. They also come from underprivileged communities that are migrants and non-migrants. With and without a history of migration.

**Perceptions of poverty among individuals who identify themselves as poor**

The poor generally feel “Helpless and have given up”. They lack basic needs; cattle which are a source of pride and livelihood, have no lands for ploughing and are not capable of doing anything for themselves. The poor are also poor enough to qualify as “deserving enough” for Government of Botswana grants and handouts, can be lazy, careless, have no shelter, no basis for survival, have no hope, are old and may be elderly and living with disabilities. The poor lack human and non-human resources remain poor and dependent on the Government of Botswana grants, handouts and loan schemes. The poor run short of necessities and have dependency on the Government of Botswana and relatives to provide for their daily survival. Some segments of the poor are too proud to talk about their poverty status. They would rather die in silence than beg for assistance from relatively wealthier people. The decline of the agricultural sector itself relegated the poor to destitution, making it impossible for them to graduate from poverty to non-poverty.

**Life history as families or as individuals**

The poor have multiple characteristics which form important aspects of their identity. Among these are the following:

a) Lack of material possessions such as food, clothing and shelter;
b) Nomadic life and view of “animals as men”;
c) Low self-esteem, lots of children, not educated, alcohol use and abuse and overall laziness to work hard and make a transition from poverty to non-poverty;
d) Where elders or predecessors were wealthy, the children inherited parents wealth, squandered it all until they owned nothing;
e) No material, no housing and having nothing. The poor are prone to alcohol and substance abuse. They ask for advices from extension workers. They are marginalised and have no good life and families. They struggle to survive in a cycle of poverty.

The poor live in rural areas that are dirty, with no room for improvement and small shop owners. They subsist on Government of Botswana ration and handouts from relatives. Some said they could work for cash if they found employment.

**Family background**

They are firstly poor as individuals and secondly as individuals and groups of people who may be blood relatives, unrelated family friends, acquaintances or just neighbours. Poverty is often found in families where there is illiteracy, no or lack of income, lack of education and adequate schooling and rurally poor homesteads of orphins, orphons, married or abandoned children.

With the advent of modernization, Botswana’s traditional extended family has been eroded deliberately by human greed, or due to the inability to cope with the demands of the high cost of living especially for families with a large number of orphans and very few bread winners. There are poor families in the midst of rich ones but unwilling to share.

Poor families may result in poverty transmitted from nucleaus and extended to present and future generations. They are characterised by lack of no transport, dependency on government handouts, illiteracy, lack of livestock and lack of school fees and other school requirements.

**Communities often identified with the poor**

Although the post-independence Government of Botswana abolished the notion of subject groups, poverty is found amongst Basarwa and Bakgalagadi, former minorities, owners of liquor spots (shabbees) shibuku (local brew depots), areas where is poor information Communication Technology (ICT) destitute families dependent heavily on the GOB. The poor are ashamed and oftentimes isolated. They are powerless, segregated in certain
Lifestyles and daily activities

Most of the poor spend a lot of time drinking traditional and modern alcoholic brews (modern boots, Kendrick, selafta and other concoctions) abuse substance handouts which ultimately have an adverse effect on their health. The poor patronise liquor spots (shebeens) move from yard to yard, sell and drink beer and other local brews and engage in petty trading. They use an escapist route to drown poverty in cheap homemade brews.

Some of the poor look for part time piece jobs; others stay at home and engage in criminal robbery petty theft and related activities to buy alcohol and drugs. A common thread that binds them is that they tend to drink a lot of alcohol and idle from sunrise to sun set. They are not worried about getting some tasks accomplished.

Interaction with other people

The main channel of interaction is through beer drinking and substance abuse. The poor isolate themselves, focus on taboos, superstitions, witchcraft to explain their plight. They have low self esteem and are not used to other people. They undermine themselves as “not belonging.” They also associate with Community Development Officers (CDOs) or intensive dialogue committees; welfare programs and gather goodwill products wherever they can. During Kgalagadi meetings, they look down upon themselves because they had the perception that people respect the rich and look down upon the poor.

Interventions to move out of poverty

The poor act as individuals and as groups. Group formation is particularly crucial for the poor to start own projects with help officers with the Government of Botswana extension.

The poor subsist on part time and seasonal jobs, small enterprises and sale of firewood, farming and rearing of small livestock: especially wealthy families. Others subsist mainly on CDD grants, part time jobs, dependency syndrome on the Government of Botswana Drought relief programme, bread delivery as boys in men carting in the domestic service and other income generating projects. The poor need intensive teaching and dialogue on how to lessen their dependency on GOB grants. They need role models for motivation, counselling on self reliance, spiritual counselling and social life intervention.

Poverty can be temporary (seasonal) or permanent, depending on how victims try to solve it. Some may start businesses and enterprises to earn or obtain a source of living. Others grab assets or inherit land and whatever is available from their terminally ill relatives.

The poor also need guidance and counselling, sharing of ideas, poverty limiting seminars, multi-sectoral approaches to meet multiple needs which may be related to training, counselling and rehabilitation not to accept poverty as there to stay for a lifetime.

Educational challenges

The challenge is the ability to effectively and efficiently communicate from the sender to the recipient and the reverse process of feedback. The poor have what Freire (1979) called “A culture of Silence”, hence one way communication by the extension cadre, are neglected and illiteracy often compounds their poverty. The poor need to be educated to unlearn their culture of silence so that they can learn to speak out and have their voices heard. The ability to find voice and speak out is a process that does not just happen in a vacuum: it is connected to several causal and support systems to enable the poor to make a transition from poverty to non-poverty. The elements of such a process include empowerment through literacy, clustering of people with similar needs and interest for needs assessment, training in available grants, planning and inception of desired projects, project implementation, monitoring and evaluation.

The other greatest challenge is to interrogate the poor with business ideas, available CDD schemes and show cases for the poor to develop a sense of purpose. They need to get rid of their illiteracy and acquire skills for high self-esteem and project management. They need to have a clear vision and objectives. The poor usually have problems of school dropout rate due to failure and illiteracy. They need to be functionally literate to change lifestyles by making a transition from illiteracy to non-literacy.

Summary

The poor generally do save a lot about short term survival tactics rather than what they can do on a long term benefit. They tend to have many children whose needs they can not adequately meet for a decent standard of living. Where survival is the main concern, the poor do not care much about acquisition of literacy skills. They complain a lot about having “nothing to eat” than making an effort to acquire literacy skills. They lack of appreciation of Government of Botswana financial and technical expertise schemes. They have no sense of self reliance. They need rehabilitation to be independent of government and relatively rich families and friends.

The poor are normal with lots of children that they hope can one day lead them out of poverty. They need positive thinking to make use of available opportunities to make a
transition from poverty to non-poverty. They are generally lazy and look down upon certain jobs as too inferior for them to do. With the impact of the cash economy, agriculture for instance, is generally perceived as manual work is heavy and good for Zimbabweans. The poor who are Botswana citizens are generally choosy about what type of job they can do, yet the poor from Zimbabwe are generally hard-working and would do any kind of part-time job that they are offered by families that can afford to pay them a wage, no matter how small. Excessive alcohol consumption is an escapist daily activity that leads to an addiction of poorly paid families especially in the rural areas and the outskirts of towns and cities where there are no job opportunities to occupy the daily lives of the poor. The poor who abuse alcohol can not engage in agriculture-based activities where the need for labour is very significant.

The poor would like to have grants for individual use and not for group projects as is the case with most Government of Botswana and NGO grants. They would not want loans since they can not pay them back or offer securities for the loans. The other forms of help available for the poor are through the process of networking with the NGOs that are gap fillers and great partners to the Government of Botswana in development projects.

THE IMPACT OF GLOBALIZATION AND THE DECLINE OF AGRICULTURE

The Globalization thesis asserts that with improvements in Information and Communication technologies, (ICT) the world has become one global village and people move and exchange ideas, network, franchise educational programmes and learn from one another across all human disciplines. There is however some sceptics who argue that nation states and boundaries still predominate over the international agenda in all aspects of ICT. Globalization resulted in a number of impacts in different sectors including agriculture.

Firstly, HIV and AIDS has a global pandemic resulted in loss of lives and Botswana became one of the countries hardest hit by HIV/AIDS. The able bodied labour force with skills that could be used in the agricultural sector diminished as victims developed AIDS opportunistic infections making it difficult to perform at their very best. Yields in agriculture dropped drastically. With the introduction of the anti retroviral therapy (ART) in 2002, life expectancy has improved and people are able to have good quality of life despite the lack of cure for AIDS. The existing programs have been helpful in removing AIDS from the list of the country's greatest killer to a chronic status where with improved services people living with AIDS are treatment adherent and able to lead normal lives.

Secondly, the low yields in the agricultural sector have resulted in Botswana seeking alternative sources of livelihood. Globalization has resulted in the physical brain drain for greener pastures from Botswana to neighbouring countries, Europe and the US in fields such as health, education and commercial agriculture. Others go for early retirement and engage in private businesses where cash is easier to earn than doing the dirty work in the field for low yields. The advent of the cash economy where results are quick make people, even the most unskilled search for opportunities in other sectors where they are guaranteed a monthly wage, no matter how low. Relaying on the heavens to release rain for agricultural production which is often treated as a blue collar occupation. The low yields from the agricultural sector are not attractive especially to young farmers aged 18 - 39 years.

Botswana's economic progress since independence has been one of the few success stories of the African continent. Forty three years ago, the country was one of the 20 poorest countries in the world. Today, it is considered the richest non-oil producing country in Africa.

This remarkable growth happened when much of the continent was struggling with African socialism which saw prosperous economies slide into poverty. At the same time, Botswana was surrounded by countries at war with themselves. To the east, the long Rhodesian war spilled over into Botswana. With the impact of globalization, diamonds are by far the most important source of income for Botswana. The discovery of diamonds in 1967, after a protracted search of twelve years, dramatically changed the pace of development in Botswana. Their combined earnings have accounted for 77 percent of the total export earnings and 45% of the GDP. These mines are jointly owned by the DeBeers Mining Company and the Botswana Government.

With the reasons advanced earlier, the growth of the cash economy over non cash transitions, agriculture for subsistence in Botswana has been adversely affected by the impact of Globalization and the cash economy. The focus of wealthy farmers is to produce for the European Economic and other Commissions through the two abattoirs in Botswana. Botswana beef and diamond sales are the main sources of external revenue. Subsistence agriculture and petty trading are the key backbone of peasant economy in Botswana. According to Ingel (1994) agriculture grows at the rate of only 5% per annum, while manufacturing grows at 7%. Industrial development is another source of livelihood where people do petty trading. Arable agriculture for subsistence, pastoral agriculture for commercial purposes, petty trading and the Government of Botswana safety nets are other sources of livelihood.

Foreign exchange reserves are, in per capita terms, one of the highest in the world and are sufficient to pay for 26 months of imports. Economic growth can be ascribed to mineral and beef exports, tourism and aid from international agencies and development partners.
However, since the 1930s, Botswana has experienced donor fatigue after graduating from severe pockets of absolute poverty. Many previously donor-funded projects have been gradually taken over by the Government of Botswana (COG) and communities to ensure sustainability.

The future of the agricultural sector

Upon the realization of the need to further develop the agricultural sector, the Government of Botswana in April 2009 acquired a loan from the African Development Bank for the rehabilitation of the of Pandamatenga Commercial Arable farms. This move was essential to show cases the need to invest more in commercial agriculture for food production and security. Prototype ventures are needed to transform the sector and improve gains.

The agricultural sector will continue to exist but for it to make an impact there is a need for transformation of the sector to cushion farmers from the harsh effects of unfavourable climatic conditions and natural disasters which hit hard on the poor. The known causes and effects of poverty can not be apprenticed to blame the victims because most of what the poor go through is structurally induced poverty characterised by early childhood socio-economic beyond individual control. Where elders of predecessors were wealthy, about 10% of the total Botswana population the children inherited parents' wealth, a few squandered it all and individually made wealth sustaining decisions, they ultimately owned nothing. The poor were open identified with lack of material wealth, lack of housing and having nothing. According to some extension workers, the poor were prone to alcohol and substance abuse as temporary psychological escape from poverty. They asked for advice from extension workers. The poor said they felt marginalised and had no good life and families to assist them in times of need. Poor people struggled to survive in a cycle of poverty from early childhood to adulthood. This is concorded by Fyson (1984) that the poor are victims of structurally inherent problems. The agricultural sector would have to be transformed for the poor to have a breakthrough.

Conclusion

A conclusion drawn from the study is that the significance of subsistence agriculture has diminished for poverty eradication especially in Botswana where there are harsh climatic conditions and the unmet demands of modern lifestyles. Subsistence agriculture on its own can no longer sustain rural and urban communities to graduate from poverty to non-poverty. Secondly, the existential experiences of poor people from early childhood have shaped who they are in relation to the declined role of the agricultural sector. This includes constructions on how they see themselves, the visions (or lack of visions) they have for themselves to make transitions from poverty in non-poverty, acceptance or non-acceptance of poverty, the sector for options. Finally, the poor thought processes and development of poverty identity belief systems. The participants of the study asserted that over the years, the cash economy has relatively taken precedence over agriculture in terms of poverty reduction.

Implications for the role of adult education

Adult education, especially through the extension made of services delivery has a role to play in promoting agricultural diversity for poverty reduction. There is however a need for a multi-sectoral approach to overhaul the agricultural sector and make it a viable tool for poverty reduction.

Adult education can play an advocacy role in ensuring that commercialization of the agricultural sector is inclusive of the poor and not skewed for the benefit of the relatively rich and healthier farmers. If agriculture is developed for the benefit of the poor who have no other source of livelihood, it can be a viable poverty reduction tool.

REFERENCES

